CloudByte™

CLOUDBYTE UTILITIES

Utilities that enable full integration and interoperation among virtualization environments, cloud stacks, applications, and distributed ElastiStor™ storage nodes

DIFFERENTIATORS

Storage resilience
By ensuring that hardware and cable failures do not impact production, storage resilience is maximized.

Business continuity
With replication to a remote site, full business continuity is ensured.

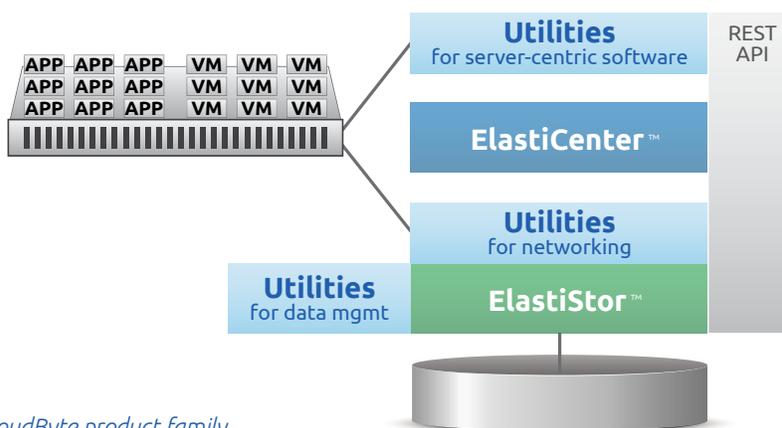**Path to future**
Add-ons provide interoperation with key virtualization and cloud stacks, thereby paving the path to the future.

Service providers, whether they provide services to their customers or to internal departments, must support a broad and diverse set of virtualization environments and cloud stacks (such as OpenStack and Citrix CloudStack) in a distributed architecture, yet most often do not have the resources needed for custom integration efforts.

SOLUTION: CLOUDBYTE UTILITIES

CloudByte Utilities combine drop-in ease with powerful storage availability, resilience, and integration capabilities. The full array of utilities provides the majority of functionality found in enterprise-class legacy storage product integrations but without their typical implementation timelines and costs. Further, these utilities enable efficient interoperation among virtualization and stack environments, breaking down storage silos.

CloudByte product family

There are two types of CloudByte Utilities – Add-ons and Plug-ins. Add-on Utilities typically extend the capabilities of ElastiStor. Plug-ins interoperate with Server-centric software such as cloud stacks, virtualization environments, and applications to provide automated coordination with ElastiCenter™ and ElastiStor. With CloudByte Utilities, costly integrations are avoided while receiving full benefits from automation from the server through storage.

ADD-ON UTILITIES

Add-on Utilities provide either optional protocol support (such as Fibre Channel) or interoperation among ElastiStor nodes:

ElastiReplicate	The ElastiReplicate add-on enables remote asynchronous replication between two ElastiStor nodes. This feature provides disaster recovery capabilities that extend the core capabilities of ElastiStor.
ElastiHA	ElastiHA provides high availability groups of up to four nodes. While conventional high availability only protects against the failure of one node, ElastiHA protects against the failure of up to three nodes. This capability is a perfect match for ElastiStor RAIDZ-3 data protection capabilities which protect against the failure of up to three physical drives without losing data. ElastiHA can be controlled from both ElastiCenter and our REST API.
ElastiFC	ElastiFC enables ElastiStor to act as a block-level Fibre Channel target device. With the plug-in, ElastiStor's storage resources (ZFS volumes, also called ZVOLS) are presented to the server as Fibre Channel disk(s). All functionality is available from both ElastiCenter and our REST API.

PLUG-IN UTILITIES

Plug-in Utilities provide integration and interoperation with virtualization environments, cloud stacks, and applications. Plug-ins are available for:

VMware vCenter	The plugin allows admins to create and manage performance-selectable VMs in real time right from the vCenter console.
OpenStack	The plugin allows storage provisioning and management in real time right from OpenStack.
Citrix CloudStack	The plugin allows storage provisioning and management in real time right from CloudStack.
Microsoft SQL Server	The plugin provides application-consistent snapshots for Microsoft SQL Server databases.

ABOUT CLOUDBYTE

Targeted to the needs of service providers—public and private—CloudByte's patent-pending storage software products uniquely deliver dynamically selectable performance for each and every application or tenant. By providing unified block, file, and direct-attached storage, CloudByte eliminates inefficient and costly storage silos. CloudByte provides scale-out growth from a single site to distributed cloud environments without disruption.

ENVIRONMENT SPECIFICATIONS

Controllers, Disk Arrays, and more	Listed in the CloudByte Hardware Compatibility List (HCL) www.cloudbyte.com/support/HCL/
Software	• **Virtualization environments:** VMware and Citrix • **Stack environments:** OpenStack and Citrix CloudStack • **Applications:** Microsoft SQL Server